

CLAIMS

1. A method for converting image data in a first format into image data in a second format, the image data in the first format having a first frame frequency and a first line frequency, the image data in the second format having a second frame frequency and a second line frequency, the method comprising the steps of:

retrieving respective signals required for producing image data of an odd field and an even field in the second format, out of moving image data in the first format from a memory to which the moving image data in the first format is written, every odd field period and every even field period in the second format, respectively;

converting the retrieved image data into first image data and second image data, both image data having the second line frequency;

outputting the image data of the odd field in the second format by mixing image data of an odd field of the first image data and image data of an odd field of the second image data at a predetermined mixing ratio;

outputting the image data of the even field in the second format by mixing image data of an even field of the first image data and image data of an even field of the second image data at a predetermined mixing ratio; and

changing the mixing ratios every field period in the second format.

2. The method for converting image data according to claim 1, wherein

5 the first format is the National Television System Committee (NTSC) format; and

the second format is the Phase Alternation by Line (PAL) format.

3. The method for converting image data according to claim 1, wherein

the first format is the NTSC format; and

the second format is switched to the NTSC format or the PAL format.

4. A converting circuit for converting image data in a first format into image data in a second format, the image data in the first format having a first frame frequency and a first line frequency, the image data in the second format having a second frame frequency and a second line frequency, the converting circuit comprising:

20 a memory to which moving image data in the first format is written;

a first circuit retrieving respective signals required for producing image data of an odd field and an even field in the second format, out of the moving image data in the first format from the memory, every odd field period and

every even field period in the second format, respectively;

a second circuit converting the retrieved image data into first image data and second image data, both image data having the second line frequency;

5 a third circuit outputting the image data of the odd field in the second format by mixing image data of an odd field of the first image data and image data of an odd field of the second image data at a predetermined mixing ratio, and outputting the image data of the even field in the
10 second format by mixing image data of an even field of the first image data and image data of an even field of the second image data at a predetermined mixing ratio; and

a fourth circuit changing the mixing ratios every field period in the second format.

15 5. The frame-converting circuit according to claim 4, wherein

the first format is the NTSC format; and

the second format is the PAL format.

6. The frame-converting circuit according to claim 4,
20 further comprising:

a circuit in which the second format is switched to the NTSC format or the PAL format, wherein

the first format is the NTSC format.

7. An electronic camera wherein image data in a first
25 format has a first frame frequency and a first line

frequency and image data in a second format has a second frame frequency and a second line frequency, the electronic camera comprising:

an image sensor, onto which an image of an object is
5 projected, outputting the image data in the first format every frame period of the first format;

a memory to which the image data in the first format output from the image sensor is written;

a first circuit retrieving respective signals required
10 for producing image data of an odd field and an even field in the second format, out of the image data in the first format from the memory, every odd field period and every even field period in the second format, respectively;

a second circuit converting the retrieved image data
15 into first image data and second image data, both image data having the second line frequency;

a third circuit outputting the image data of the odd field in the second format by mixing image data of an odd field of the first image data and image data of an odd field
20 of the second image data at a predetermined mixing ratio, and outputting the image data of the even field in the second format by mixing image data of an even field of the first image data and image data of an even field of the second image data at a predetermined mixing ratio;

25 a fourth circuit changing the mixing ratios every field

period in the second format; and

an external terminal outputting the image data output from the third circuit.

8. The electronic camera according to claim 7, further
5 comprising:

a circuit in which the second format is switched to the NTSC format or the PAL format, wherein
the first format is the NTSC format.